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TOM DIX, President      THEODORE REED KENDALL, Editor  
 O. E. POTTER, Associate Editor  
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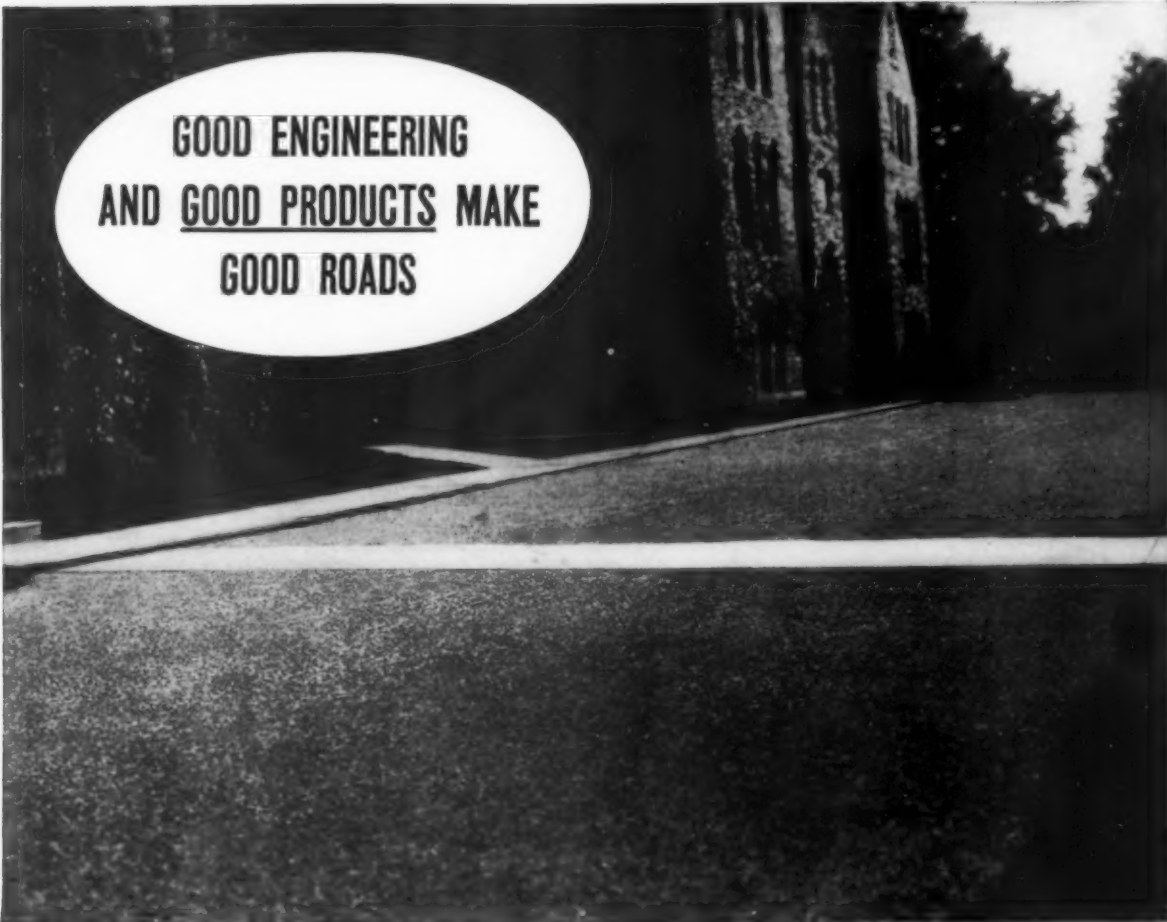
# Contractors *and* Engineers Monthly

## TABLE OF CONTENTS

<b>BOOK REVIEWS</b>		<b>PNEUMATIC MACHINERY</b>	
Revised Edition of Welding Handbook.....	23	A New Automatic-Feed Self-Rotating Drill.....	46
Proceedings of the American Toll Bridge Association..	27	<b>ROAD MACHINERY</b>	
The Construction and Use of Corrugated Metal Pipe		A Power-Controlled Elevating Grader.....	40
Culverts .....	37	Spreading and Finishing Bituminous Roads in One	
The Testing and Qualification of Welders.....	39	Operation .....	40
<b>BRIDGE CONSTRUCTION</b>		A New Development in Vibrating Screed Boards...	44
New River Bridge at Manistee, Mich. ....	37	A New Automatic Road Finisher.....	46
<b>CARE OF EQUIPMENT</b>		<b>TRUCKS</b>	
Air Cleansing Prevents Premature Engine Expense....	33	A New Half-Ton Service Truck.....	42
<b>CODE FOR DISTRIBUTORS</b>		<b>ITEMS OF INTEREST</b>	
The Construction Machinery Distributing Trade Code		Our Front Cover.....	23
As It Affects the Contractor.....	34	\$200,000,000 Highway Fund Apportioned to the States..	27
<b>CONSTRUCTION IDEAS</b>		Sixth Annual Bridge Awards.....	30
How the Other Fellow Did It.....	38	What Causes Explosives Accidents?.....	32
<b>CONSTRUCTION INDUSTRY NEWS</b>		New Equipment Brings Profits to Progressive Con-	
News of Manufacturers, Distributors and Trade Associ-		tractors .....	48
ations .....	39	<b>LAW AND LITIGATION</b>	
<b>THE EDITOR COMMENTS</b>		Legal Points for Contractors.....	36
Personal Observations and Reflections.....	35	<b>LEVEE CONSTRUCTION</b>	
<b>EQUIPMENT AND MATERIALS</b>		Notes from a Levee Contractor.....	31
<b>AIR COMPRESSORS</b>		<b>LUBRICATION</b>	
Oil-Engine-Driven Air Compressors.....	44	The Lubrication of Motor Trucks.....	24
<b>CONCRETE MACHINERY</b>		<b>MATERIAL HANDLING</b>	
A New End-Discharge Mixer.....	40	Delivering World's Largest Pipe to Boulder Dam.....	37
A 1934-Model Paver.....	42	<b>ROAD CONSTRUCTION</b>	
<b>DIRT MOVERS</b>		The Operation of a Mixed-in-Place Contract.....	21
Two Additions to Line of Scrapers.....	46	Brains Save Brawn on Concrete Paving.....	28
<b>DUMP WAGONS</b>		<b>WELDING</b>	
A New Dirt-Moving Unit.....	44	Dredging Bucket Saved by Welding.....	32
<b>ENGINES, OIL, GAS AND DIESEL</b>			
A New Opposed-Piston Diesel Engine.....	42		
<b>LUBRICANTS</b>			
Lubricating Construction Equipment.....	42		
<b>MISCELLANEOUS</b>			
A Transparent Surface Waterproofing.....	46		



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AUGUST, 1934

VOLUME 29, NO. 2

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## TABLE OF CONTENTS

### CONSTRUCTION IDEAS

- How the Other Fellow Did It..... 40

### CONSTRUCTION INDUSTRY NEWS

- News of Manufacturers, Distributors and Trade Associations ..... 42

### DAM CONSTRUCTION

- Heavy Excavation Furnished Material for Rock-Fill Dam 22

### THE EDITOR COMMENTS

- Personal Observations and Reflections..... 39

### EQUIPMENT AND MATERIALS

- AIR COMPRESSORS  
 A Trailer-Mounted Air Compressor..... 44

- CONCRETE MACHINERY  
 A New Trailer-Mixer ..... 46

- CRUSHING AND SCREENING PLANTS  
 A Portable Crushing Unit with V-Belt Drive..... 48

- EXCAVATORS  
 Streamlines for Shovel Cab..... 44

- MATERIAL HANDLING EQUIPMENT  
 A Line of Portable Belt Conveyors..... 46

- MISCELLANEOUS  
 New Clutch Facilitates Handling Heavy Shovel Loads ..... 46

- ROAD MACHINERY  
 A New Pressure Distributor for Bituminous Materials ..... 44  
 A Completely New Leaning Wheel Grader..... 48

- TORCHES, HIGHWAY  
 An Improved Highway Signal Torch..... 44

- TRAILERS, MACHINERY  
 A Two-Wheel Machinery and Materials Trailer.... 48

- WELDING EQUIPMENT  
 A New Portable Oxy-Acetylene Generator..... 46

### GRADING

- Blasting 209,500 Cubic Yards of Rock on a New York Highway Project ..... 19  
 A 1,116,000-Cubic Yard Excavation Contract..... 41

### Have You Any Questions?

*Is there any piece of equipment, or particular part, the lubrication of which puzzles you? If so, write to us about it, stating your problem in as much detail as possible. Enclose a stamped addressed envelope for reply and we shall do our best to help you. Or if you have any suggestions for particular lubrication problems to be discussed in our pages, we shall welcome them also. We want this series of articles on the important subject of lubrication to be of the greatest possible help to you in properly maintaining your equipment.*

### ITEMS OF INTEREST

- Excavation on the Dotsero Cut-Off..... 24  
 Year's Work on Federal Highways Nearly Equals Road Around Earth ..... 42  
 Awards in Annual Bridge Design Competition..... 42  
 Up-to-Date Machinery and Materials ..... 50

### LUBRICATION

- The Lubrication of Road Rollers and of Steam-Operated Equipment ..... 31

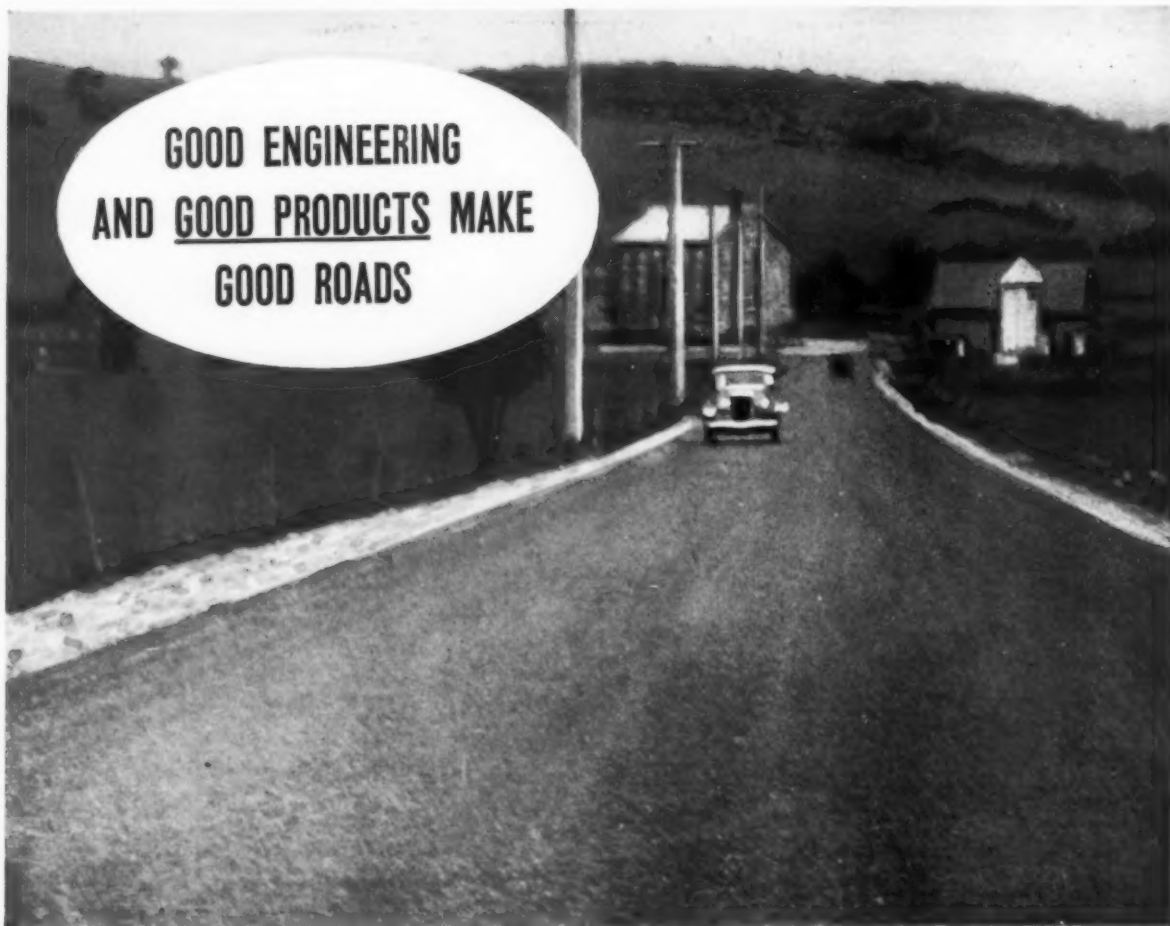
### ROAD CONSTRUCTION

- Replacing an Old Tar Macadam Road with Penetration Macadam ..... 25  
 Two Mixers on Concrete Base for Brick Pavement.... 28  
 Ledge, Muck and Rain on Connecticut Paving Project.. 34



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SEPTEMBER, 1934

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## TABLE OF CONTENTS

### BOOK REVIEWS

- Methods of Testing Subgrade Soil..... 40

### BRIDGE CONSTRUCTION

- Features of Concreting on the New Cape Cod Canal  
Highway Bridges ..... 21  
Building a Public Works Highway Bridge in Arkansas. 37

### CONSTRUCTION IDEAS

- How the Other Fellow Did It..... 38

### CONSTRUCTION INDUSTRY NEWS

- News of Manufacturers, Distributors and Trade Associations ..... 40

### DAM CONSTRUCTION

- Progress at Grand Coulee..... 32  
A 4-Year Project at Fort Peck Dam..... 37

### THE EDITOR COMMENTS

- Personal Observations and Reflections..... 35

### EQUIPMENT AND MATERIALS

- CRUSHING AND SCREENING PLANTS  
A Crushing and Screening Plant on Wheels..... 44

- DIRT MOVERS  
New Scraper for Self or Shovel Loading..... 46

- MISCELLANEOUS  
A Simplified Cost System for Truck Owners..... 44  
A New Service for Contractors..... 44  
A New Form Tightener..... 46

- ROAD MACHINERY  
A 3-Wheel Highway Sweeper..... 42  
A New Spreader-Finisher for Secondary Roads... 42

- TUNNEL EQUIPMENT  
Tunnel Shields for Constructing Underground  
Sewers ..... 46

- WAGONS, CRAWLER  
A New Door Wind-Up for Bottom-Dump Wagons.. 42

- WELDING EQUIPMENT  
A New Welding Electrode for Mild Steel..... 42

### ITEMS OF INTEREST

- The Use of Vibration in Finishing Concrete Pavement.. 31  
Delivering Equipment by Barge..... 31  
What Is So Rare?..... 37  
Watch These Pages for New Equipment..... 48

### A. R. B. A. Convention for 1935

*The 1935 Convention and Hotel Exhibit of the American Road Builders' Association will be held at the Willard Hotel, Washington, D. C. on January 22-25, 1935. In selecting Washington as the location for the convention, it was felt that, inasmuch as Federal and State Legislation will play such an important part in continuing the highway program in the next few years, the proceedings of the convention from the National Capital will have a far-reaching effect.*

*The advance of the highway program depends upon the efforts of the highway industry and profession and it is hoped that the attendance will be large and that everyone will take an active part in the convention proceedings.*

### LAW AND LITIGATION

- Legal Points for Contractors..... 36

### LUBRICATION

- The Lubrication of Mixers, Pavers and Finishers..... 29

### ROAD CONSTRUCTION

- An Effective Batching Set-Up for Industrial Railway  
Haulage ..... 28  
Copper Mine Waste Used as Sheet Asphalt Aggregate  
in Northern Michigan..... 33

### WELDING

- Welded Monitor Frames for World's Fair Building.... 32



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The October 1934 Issue of

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## Texas Builds Triple Railroad Underpasses

Page 19

*The elimination of the hazards of four lines of railroad tracks offered the contractor some unusual problems of organization and methods. Three underpasses were included in the project, which had to conform to the requirements of the railroads which would operate over them. This article is a detailed description of how a Texas contractor handled the job.*

## Improving U. S. Route 1A Through an Industrial City

Page 22

*Laying a concrete road in new location, without the annoyance of traffic, can present problems aplenty to the contractor—but paving a street through city traffic is another thing! A Connecticut contractor had such a job in Bridgeport, the details of which are told herein.*

## Settling Fills in the Pacific Northwest

Page 25

*Another example of the practicability of settling fills by blasting. The use of this comparatively new but already highly successful method on two projects in Washington is described.*

## Beating Wet Weather on Levee Enlargement

Page 27

*The Bogey Man of all contractors—RAIN! The methods and equipment used on a levee enlargement project in Louisiana and how their careful selection made it possible to continue work when many other jobs were shut down.*

## The Lubrication of Crushing and Screening Equipment

Page 30

*By this time, you must know that we believe in lubrication! However, we urge you to give this subject even more attention. This installment contains suggestions for the care of your crushing and screening equipment, and also some helpful hints on changes in your lubricants to offset the cold weather which is already sneaking up on us.*

## Fleet of 28 Trucks Hauled Lime-Rock Base

Page 35

*With a dead haul of 10 miles for every load, and a maximum haul of 22.9 miles, a contractor needs a well-maintained and adequate fleet of trucks, and a good organization if lost time is not to eat up his profits. A Georgia contractor licked this problem on a 12.9-mile lime-rock and surfacing contract this past summer.*

## Are You Losing Profits Through Lost Time?

Page 38

*Job management and its effect on profits in bituminous road construction is the subject of a detailed and informative article, of which this is the first installment.*

## The Editor Comments

Page 41

*The Editor tells how FRS labor on PWA jobs has boosted contractors' bids and given both engineers and contractors something else to worry about.*

## New Equipment and Materials

Pages 44-48

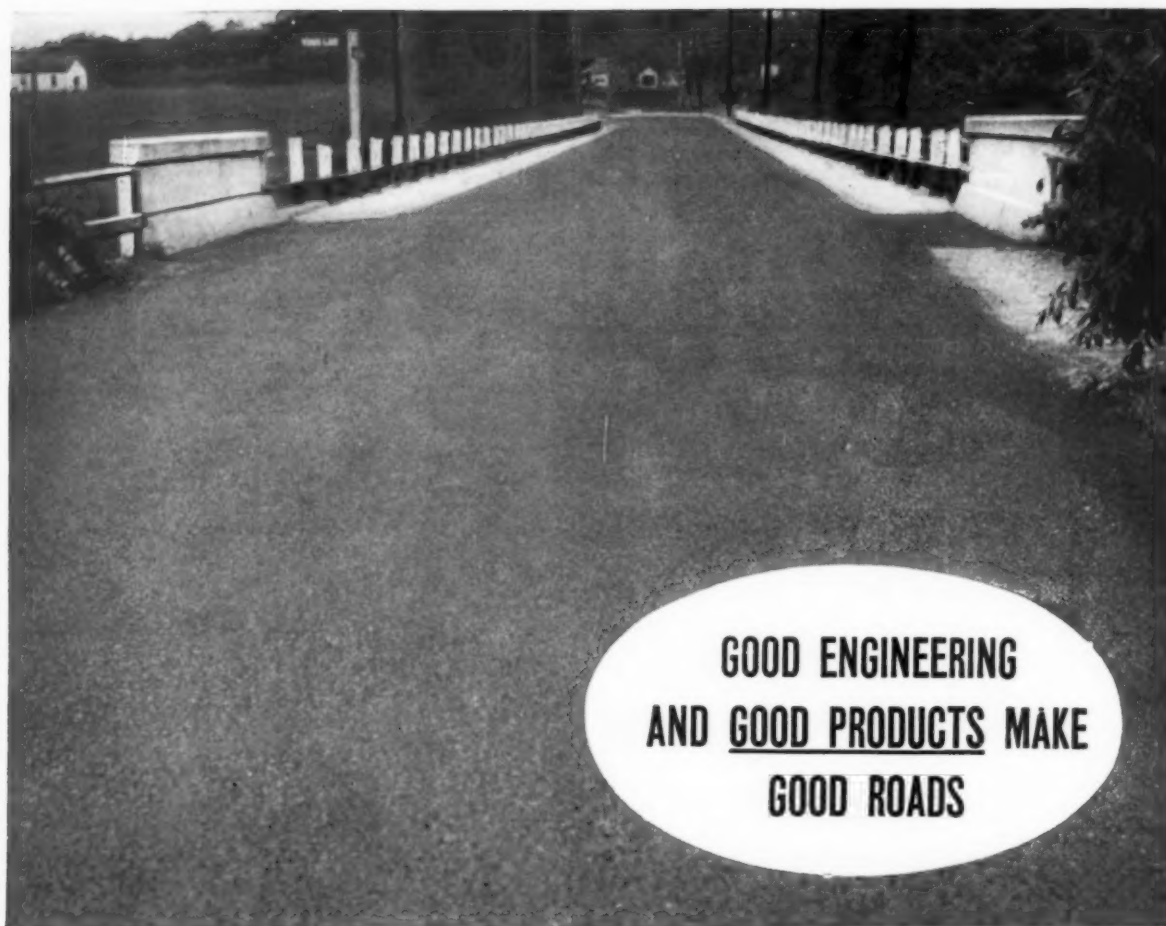
*The latest developments in construction equipment.*

## Manufacturers' Literature for Your Use

Pages 50-52

*A listing of booklets and catalogs describing new equipment and materials and improvements in standard equipment, which are available to contractors and engineers, gratis, and which should be on every contractor's desk for reference.*

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The November 1934 Issue of

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## Work Goes on Night and Day at Norris Dam

Page 19

*"Night and Day" might well be adopted as the theme song for the mighty TVA project at Norris Dam where the various activities go on 22 hours out of every 24. This article describes the work of producing and handling the aggregates and placing the concrete for this huge dam, where as much as 3,000 cubic yards of concrete are placed in one 22-hour day.*

## Big Contractor—Big Grading Project—Little Fuss and Fast Work

Page 25

*The adaptability of a contractor to the problems of a job, the use of a variety of equipment and a well-organized working crew combined to make it possible for this contractor to handle a 15.33-mile grading job with speed and efficiency.*

## The Lubrication of Pneumatic Equipment

Page 27

*A number of "Do's and Don't's" in the lubrication of air compressors and pneumatic tools which are well worth studying and applying to your own particular lubrication problems.*

## Are You Losing Profits Through Lost Time? Part II

Page 30

*The second installment of an article describing a detailed study by the Division of Management, U. S. Bureau of Public Roads, of mixed bituminous paving jobs and their suggestions for eliminating lost time in this type of work.*

## 1934 Bay State Project Along Paul Revere's Route

Page 33

*The most important highway project in Massachusetts in 1934 is the construction of 15.2 miles of road from Cambridge to Concord, which provides a 40-foot through highway to relieve the existing highways now overburdened with traffic and in addition eliminates a number of grade crossings, thus increasing the safety with which this trip can be made. This article is a general summary of the five sections of the project, and will be followed by three more detailed articles, describing the aggregate producing, the paving and the grading of various sections of the job.*

## \$250,000,000 in PWA Jobs

Page 35

*A list of the PWA jobs in Greater New York where Uncle Sam is spending \$250,000,000 to make possible many much-needed improvements and to aid employment.*

## The Editor Comments

Page 37

*The Editor takes a critical attitude toward some recent "tricks of the trade" among contractors and also points out how PWA regulations are boosting labor costs.*

## New Equipment and Materials

Pages 43-48

*The latest developments in construction equipment.*

## Manufacturers' Literature for Your Use

Pages 50-52

*A listing of booklets and catalogs describing new equipment and materials and improvements in standard equipment, which are available to contractors and engineers gratis, and which should be on every contractor's desk for reference.*



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## Hollow Piers and Spandrel Columns—Features of New Concrete Bridge

Page 17

*The methods used by a West Virginia contractor in constructing one of the most attractive concrete bridges in the East, 1,328 feet long, with arch rings, hollow piers and spandrel columns, across a river and two railroads.*

## Producing Aggregate for Fast Paving

Page 21

*The operation of a complete roadside sand and gravel plant by a Massachusetts contractor for the production of aggregate for the concrete pavement and bridge structures on the Cambridge-Concord highway.*

## The Lubrication of Wire Rope and Chains

Page 23

*The special and distinctive problems of the lubrication of wire rope and chains, and recommendations for their satisfactory solution are discussed in this twelfth article in our lubrication series.*

## Successful Experiment in Road-Mix

Page 25

*The problems of working in ball-bearing sand where it was almost impossible to operate equipment plus the trials of an experimental tar road-mix on a 7.5-mile contract and how the contractor solved them are described in this article.*

## Jumbos Set Tunnel Record

Page 28

*The unusual equipment and methods which accomplished a record for rock tunneling in driving the Mecca Pass Tunnels on the main line of the Colorado River Aqueduct.*

## Are You Losing Profits Through Lost Time? Part III

Page 30

*A discussion of the effect of weather conditions in relation to lost time, a bin shortage and how it may be avoided and of many so-called minor delays which may seem unimportant in themselves but which in the aggregate amount to major losses in time—and profits!*

## Production Methods Used on Welding for Construction Purposes

Page 35

*Some helpful and worthwhile suggestions for the methods of handling shop work and field welding of pipe lines and similar jobs which have proved to make for efficiency and speed in the work and satisfactory completion of the job.*

## The Editor Comments

Page 41

*Pig in a bag, PWA and our new format.*

## New Equipment and Materials

Pages 42-48

*The latest developments in construction equipment.*

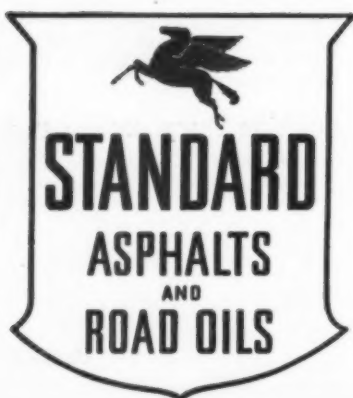
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